

**THE PATENT OFFICE OF THE STATE INTELLECTUAL PROPERTY OFFICE
OF THE PEOPLE'S REPUBLIC OF CHINA**

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Shanghai Patent & Trademark Law Office	Date of Dispatch May 9, 2008
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Application No.: 200480002396.8	Applicant: MICROSOFT CORPORATION
Application Date: July 29, 2004	Agent:
Title: SYSTEMS FOR THE IMPLEMENTATION OF A SYNCHRONIZATION SCHEMAS	

**THE FIRST OFFICE ACTION
(PCT APPLICATION IN THE NATIONAL PHASE)**

1. ☒ According to the Request for Substantive Examination raised by the applicant and based on the provision of Item 1, Article 35 of the Patent Law, the Examiner has proceeded with the Examination as to Substance on the above mentioned application for patent for invention.
☐ According to Item 2, Article 35 of the Chinese Patent Law, the Patent Office has decided to examine the above application for patent for invention.
2. ☒ The applicant has requested that the filling date of
 21 August 2003 at the US Patent Office as the priority date,
 21 August 2003 at the US Patent Office as the priority date,
 24 October 2003 at the US Patent Office as the priority date,
3. ☐ The amendment documents submitted on _____ and _____ by applicant.
 ☐ The following amended documents submitted by the applicant cannot be accepted for not conforming to the provision of Article 33 of the Patent Law:
 ☐ The Chinese version of the attachment of the International Preliminary Examination Report.
 ☐ The Chinese version of the amended document submitted according to the provision of Rule 19 of the Patent Cooperation Treaty.
 ☐ The amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.
 ☐ The amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.
 Refer to the text of the notice for the specific reason of non-acceptance thereof.
4. ☒ The examination is conducted by directing at the Chinese version of the original International Application submitted.
 ☐ The examination is conducted by directing at the following application documents:
 ☐ Description,
 p. _____, the Chinese version of the original International Application Document submitted;
 p. _____, the Chinese version of the attachment of the International Preliminary Examination Report;
 p. _____, the amended document submitted according to the provision of Rule 28 or Rule 41 of

the Patent Cooperation Treaty.

p. _____, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

☐ **Claims,**

_____, the Chinese version of the original International Application Document submitted.

_____, the Chinese version of the amended document submitted according to the provision of Rule 19 of the Patent Cooperation Treaty.

_____, the Chinese version of the attachment of the International Preliminary Report.

_____, the amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.

_____, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

☐ **Attached Drawings,**

p. _____, the Chinese version of the original International Application Document submitted.

p. _____, the Chinese version of the attachment of the International Preliminary Examination Report.

p. _____, the amended document submitted according to the provision of Rule 28 or Rule 41 of the Patent Cooperation Treaty.

p. _____, the amended document submitted according to the provision of Rule 51 of the Implementing Regulations of the Patent Law.

☐ Abstract and abstract drawings, the Chinese version of the original International Application Document submitted.

☒ This Notice cites the following Comparison Document(the number of which shall continue to be used in the subsequent examination proceedings):

No.	Number/Title of Document	Date of Publication (or the filing date of the conflicting Application)
1	US6553391B1	2003-04-22

5. The conclusive opinion drawn from the examination:

☐ **As regards the Specification:**

☐ The contents of the application fall under the scope stipulated by Article 5 of the Patent Law for which no patent right should be granted.

☐ The specification does not conform with the provision of Item 3, Article 26 of the Patent Law.

☐ The drafting of the specification does not conform with the provision of Rule 18 of the Implementing Regulations.

☒ **As regards the Claims:**

☒ Claim 1,12 does not possess the novelty as stipulated in Item 2, Article 22 of the Patent Law.

☒ Claim 2-11,13-19 does not possess the inventiveness as stipulated in Item 3, Article 22 of the Patent Law.

☐ Claim _____ does not possess the practical applicability as stipulated in Item 4, Article 22 of the Patent Law.

☒ Claim 20-27 falls under the scope of Article 25 of the Patent Law where no patent right is to be granted.

☐ Claim _____ does not conform with the provision of Item 4, Article 26 of the Patent Law.

☐ Claim _____ does not conform with the provision of Item 1, Article 31 of the Patent Law.

- ☐ Claim _____ does not conform with the provision of Article 33 of the Patent Law.
- ☐ Claim _____ does not conform with the provision of Item 1, Rule 13 of the Implementing Regulations of the Patent Law.
- ☐ Claim _____ does not conform with the provision of Rule 18 of the Implementing Regulations of the Patent Law.
- ☒ Claim 1-5,7-16,18-19 does not conform with the provisions of Rules 20 of the Implementing Regulations of the Patent Law.
- ☐ Claim _____ does not conform with the provisions of Rules 21 of the Implementing Regulations of the Patent Law.
- ☐ Claim _____ does not conform with the provisions of Rules 22 of the Implementing Regulations of the Patent Law.
- ☐ Claim _____ does not conform with the provisions of Rules 23 of the Implementing Regulations of the Patent Law.

Refer to the text of this Notice for the specific analyses of the conclusive opinion.

6. Based on the above conclusive opinion, the Examiner deems that:
 - ☐ The applicant shall amend the application documents in accordance with the requirements raised in the text of the Notice.
 - ☐ The applicant shall discuss in his observations reasons why this application for patent can be granted a patent right, and amend the portions indicated in the text of the Notice which have been deemed as not conforming with the provisions, or no patent right shall be granted.
 - ☒ There are no substantive contents in the application for patent that can be granted a patent right. If the applicant does not present reasons or the reasons presented are not sufficient, the application shall be rejected.
7. The applicant is asked to note the following items:
 - (1) According to the provision of Article 37 of the Patent Law, the applicant shall submit his observations within four months from the receipt of this Notice. Where, without justified reasons, the applicant does not respond at the expiration of said date, the application shall be deemed to have been withdrawn.
 - (2) The applicant shall amend his application according to Article 33 of the Patent Law. The amended documents shall be in duplicate, and the form, in conformity with the relevant provisions in the Examination Guide.
 - (3) The applicant and/or his agent can not, without first making an appointment, go to the Patent Office to have an interview with the Examiner.
 - (4) The observations and/or the amended documents shall be mailed or delivered to the Department of Receipt, the Patent Office of the State Intellectual Property Office. No documents shall possess legal effects if not mailed or delivered to the Department of Receipt.
8. The text of this Notice totals 4 page(s), and includes the following attachment(s):
 - ☒ duplicate copy(ies) of cited comparison document(s), altogether 1 copy(ies) 11 pages.
 - ☐

Examination Department: _____ Examiner(Seal): _____

TEXT OF THE FIRST OFFICE ACTION

Application Number: 200480002396.8

After examination, the office action is now provided as follows:

1. Claims 1 and 12 do not possess the novelty as stipulated by Item 2, Article 22 of the Patent Law.

Claim 1 does not possess novelty. Claim 1 claims to protect “a method for synchronizing multiple instances of a storage platform for a hardware/software interface systems (e.g., WinFS)”. Reference 1 (US6553391B1) disclosed a method for implementing synchronization within different systems, with the following details (referring to Description, column 1 lines 49-51, column 5 lines 1-25, Fig. 2A and Fig. 2B): a file (corresponding to “dividing said storage platform into basic units of granularity” in Claim 1) reference manipulation is received in the source DBMS 20 and is recorded in the log 24. Such a file reference manipulation can be caused by an SQL INSERT, DELETE, or UPDATE operation pursuant to file changes and other operations in the source file system 16 in accordance with DataLinks principles set forth in the above-referenced patent (corresponding to “sequentially enumerating changes and tracking said changes on a per change unit basis” in Claim 1); When it is time to replicate, the logic moves to block 56, wherein the data propagation module 36 of the target DBMS 34 retrieves data by accessing the change data table 26 for a differential refresh, used most of the time, or the source table 28 for a full refresh, used during initialization wherein all data in the source table is propagated to the target table (corresponding to “for each instance, tracking the state of changes for that instances, as well as the state of changes for a plurality of other known instances in the sync community (sync partners); and for synchronization, identifying new changes by comparing the enumerated changes for a particular instance with the state of changes for that instance” in Claim 1).

Thus it can be seen, all the contents of Claim 1 have been disclosed in Reference

1. Both of them belong to the same technical field, use the same technical means, solve the same technical problem, i.e., data synchronization, and have the same expected effect. Therefore, the technical solution protected by Claim 1 does not possess the novelty as stipulated by Item 2, Article 22 of the Patent Law with respect to Reference 1.

Claim 12 does not possess novelty. Claim 12 claims to protect “a system for synchronizing multiple instances of a storage platform for a hardware/software interface systems (e.g., WinFS)”. Reference 1 (US6553391B1) disclosed a system for implementing synchronization within different systems, with the following details (referring to Description, column 1 lines 49-51, column 5 lines 1-25, Fig. 2A and Fig. 2B): a file (corresponding to “basic units” in Claim 12) reference manipulation is received in the source DBMS 20 and is recorded in the log 24. Such a file reference manipulation can be caused by an SQL INSERT, DELETE, or UPDATE operation pursuant to file changes and other operations in the source file system 16 in accordance with DataLinks principles set forth in the above-referenced patent (corresponding to “a subsystem for sequentially enumerating changes and tracking said changes on a per change unit basis” in Claim 12). When it is time to replicate, the logic moves to block 56, wherein the data propagation module 36 of the target DBMS 34 retrieves data by accessing the change data table 26 for a differential refresh, used most of the time, or the source table 28 for a full refresh, used during initialization wherein all data in the source table is propagated to the target table (corresponding to “a subsystem for tracking, for each instance, the state of changes for that instances, as well as the state of changes for a plurality of other known instances in the sync community (sync partners); and a subsystem for synchronization, identifying new changes by comparing the enumerated changes for a particular instance with the state of changes for that instance” in Claim 12).

Thus it can be seen, all the contents of Claim 12 have been disclosed in Reference 1. Both of them belong to the same technical field, use the same technical means, solve the same technical problem, i.e., data synchronization, and have the same expected effect. Therefore, the technical solution protected by

Claim 12 does not possess the novelty as stipulated by Item 2, Article 22 of the Patent Law with respect to Reference 1.

2. Claims 2-11 and 13-19 do not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claims 2-4 do not possess inventiveness. Claims 2-4 further define Claim 1. The additional technical features of them are technical skills commonly used in the art, i.e., basic units into which the storage platform was divided, e.g., change units, are Items or Properties. Therefore, in the case that Claim 1, to which they refer, does not possess the novelty, the technical solutions protected by Claims 2-4 do not possess prominent substantive features or represent a notable progress, and thus do not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 5 does not possess inventiveness. Claim 5 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e., instances of storage platform comprise a sync community. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 5 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 6 does not possess inventiveness. Claim 6 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e., changes to a replica are uniquely enumerated based on a unique sequentially replica identification. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 6 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 7 does not possess inventiveness. Claim 7 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e.,

the changes are enumerated at a change unit level. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 7 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 8 does not possess inventiveness. Claim 8 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e., conflicts are detected and resolved at a change unit level. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 8 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 9 does not possess inventiveness. Claim 9 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e., instances maintain a synchronization mapping of their known sync partners with which to synchronize in a sync community. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 9 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 10 does not possess inventiveness. Claim 10 further define Claim 1. The additional technical features are technical skills commonly used in the art, i.e., an instance may have multiple mappings in order to enable different synchronization behaviors with different sync partners in the same sync community. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 10 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claim 11 does not possess inventiveness. Claim 11 further define Claim 1. The

additional technical features are technical skills commonly used in the art, i.e., mapping comprises community identification and a mapping identification for said sync partner, in order to synchronize with said sync partner without information pertaining to a location for said sync partner. Therefore, in the case that Claim 1, to which it refers, does not possess the novelty, the technical solutions protected by Claim 11 does not possess prominent substantive features or represent a notable progress, and thus does not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

Claims 13-19 do not possess inventiveness. Claims 13-19 further define Claim 12. The technical solutions about product disclosed by Claims 13-19 correspond to the technical solutions about method disclosed by Claims 2-8. And the additional technical features disclosed by Claims 13-19 and Claims 2-8 correspond to each other. So, according to the above observations about Claims 2-8, the additional technical features disclosed by Claims 13-19 are commonly known knowledge. Therefore, in the case that Claim 12, to which they refer, does not possess the novelty, the technical solutions protected by Claims 13-19 do not possess prominent substantive features or represent a notable progress, and thus do not possess the inventiveness as stipulated by Item 3, Article 22 of the Patent Law.

3. Claims 20-27 fall into the scope of the rules and methods of mental activities as stipulated by Item 1(2), Article 25 of the Patent Law, and thus cannot be granted a patent right.

Claims 20-27 claim to protect “a computer-readable medium comprising computer readable instructions”. But it can be seen from the description of the above claims that, what they protect is not a technical solution making use of natural law and natural force, but substantively the computer program recorded on the computer-readable storage medium, which falls into the scope of the rules and methods of mental activities as stipulated by Item 1(2), Article 25 of the Patent Law, and thus cannot be granted a patent right.

4. Claims 1-5, 7-16, and 18-19 are unclear, and therefore, do not comply with the provision of Item 1, Rule 20 of the Implementing Regulations of the Patent Law.

Claims 1 and 12 are unclear: (1) Claims 1 and 12 relate to “synchronizing hardware/software interface systems (e.g., WinFS)”, “basic units, (e.g., change units)” and “other known instances (sync partners)”. The contents in the brackets are not reference signs or do not belong to other necessary situations, so the brackets are not used properly. Furthermore, the contents are not viewed as the antecedent basis of “change unit” and “sync partners”. (2) The meanings of the term “sync community” in Claims 1 and 12 are unclear.

The diction “change unit” in Claims 2-4 and Claims 13-15 lacks an antecedent basis.

Claims 4 and 15 relate to “an individual Property (but not a Property of a Nested Element in said Item, Extension, or Relationship)”. The contents in the brackets are not reference signs or do not belong to other necessary situations, so the brackets are not used properly.

The meanings of the term “multi-master sync community” in Claims 5 and 16 are unclear.

The meanings of the term “change unit level” in Claims 7-8 and 18-19 are unclear.

The diction “sync partners” in Claims 9-11 lacks an antecedent basis.

Summing up the above, the above deficiencies in Claims 1-5, 7-16, and 18-19 caused the scopes of protection thereof unclear, and therefore, do not comply with the provision of Item 1, Rule 20 of the Implementing Regulations of the Patent Law.

In view of the above reasons, none of the independent claims or the dependent

claims of this application involves novelty/inventive step. Meanwhile, there are no other substantive contents in the description that deserve to be granted a patent right. Therefore, even if the applicant rearranges and/or further defines the claims according to the description, the application still has no prospect of being granted a patent right. If the applicant is unable to present sufficient reasons proving that the application involves novelty and inventive step within the time limit specified in the Notice, the application will be rejected.